

**REMARKS****A. Status of the Claims**

Currently, claims 1-27 are pending. Of these claims, claims 1, 2, 4-6, 13-17, and 26 have been rejected under 35 U.S.C. §102(e) for allegedly being anticipated by U.S. Patent Application No. 2002/0039232 to Takeyama ("Takeyama"). Claims 3 and 7-12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Takeyama, in view of U.S. Patent No. 6,687,057 to Yamazaki ("Yamazaki"). Claims 18-25 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Takeyama, in view of U.S. Application No. 2003/0107816 to Takagi ("Takagi"). Claim 27 has been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Takeyama, in view of U.S. Patent No. 5,917,662 to Sekita ("Sekita").

**B. Applicant's Claims Are Not Anticipated by Takeyama**

Applicant respectfully traverses the rejection of claims 1, 2, 4-6, 13-17, and 26 for allegedly being anticipated by Takeyama. Briefly, Takeyama fails to teach, disclose, or suggest all of the claim elements in Applicant's claims. Accordingly, the rejection of these claims under 35 U.S.C. §102 should be withdrawn. MPEP §2131.

**1. Takeyama Fails to Teach a "First Surface" With the Properties Recited In Applicant's Claims**

Previously, Applicant had argued that Takeyama fails to teach all of the claim elements of claim 1, because surfaces 4<sub>1</sub> and 4<sub>4</sub> were not (and still are not) a "first surface" in the eyes of Applicant. This argument was found unpersuasive by the Examiner.

However, even assuming, *arguendo*, that surfaces 4<sub>1</sub> and 4<sub>4</sub> of Takeyama can be considered as one surface as suggested by Examiner, Applicant still maintains that Takeyama does not teach a “first surface” as recited in Applicant’s claim 1. To see this, consider the text of claim 1, reproduced below:

1. (original) An optical system, comprising:  
a plurality of optical surfaces including a first surface on which light rays from an object are incident and which has at least a reflective action, and a second surface reflecting the light rays reflected by the first surface back toward the first surface;  
wherein the first surface reflects a central field-angle principal ray, which comes from the second surface and is again incident on the first surface, to the opposite side of the previous reflection with respect to a normal at a hit point of the central field-angle principal ray on the first surface; and  
wherein the plurality of optical surfaces includes a diffractive optical surface [emphasis added].

As shown by the highlighted portion of the text, claim 1 recites that “first surface reflects a central field angle principal ray, which comes from the second surface...”. Applicant, upon review of Takeyama, does not see where Takeyama teaches, discloses, or suggests that a “first surface reflects a central field angle principal ray, which comes from the second surface...”. Instead, Figure 1 of Takeyama clearly shows that the light reflected from surface 4<sub>2</sub> (“the alleged “second surface”) **passes through** surface 4<sub>1</sub> (“the alleged first surface”), rather than being reflected.

For at least this reason, Applicant maintains that the rejection of claims 1, 2, 4-6, 13-17, and 26 under 35 U.S.C. §102 as being anticipated by Takeyama should be withdrawn. Reconsideration and withdrawal of the rejection are respectfully requested.

C. Applicant's Claims Are Not  
Unpatentable Over the Cited References

Applicant respectfully traverses the rejections of claims 3 and 7-12 as allegedly being unpatentable over Takeyama, in view of Yamazaki. Also traversed are the rejection of claims 18-25 over Takeyama, in view of Takagi; and the rejection of claim 27 over Takeyama, in view of Sekita. Briefly, the references, alone or in combination, fail to teach, disclose, or suggest all of the claim elements of Applicant's claims. Accordingly, the rejection of Applicant's claims under 35 U.S.C. §103(a) should be withdrawn. MPEP §2143.

1. The Combination of Takeyama and Yamazaki Does  
Not Render Applicant's Claims Unpatentable

In rejecting claims 3 and 7-12 over Takeyama, in view of Yamazaki, the Office Action relies on Takeyama for all elements of the claims, except for a reference to the second surface being a diffractive surface (claim 3) and a reference to the symmetry of the diffractive surface (claims 7-12). For these missing elements, the Office Action relies on Yamazaki. Applicant, however, does not see where in Yamazaki there is any teaching, express or otherwise, of a "first surface" as recited in Applicant's claims. Accordingly, since Takeyama also apparently fails to teach Applicant's "first surface", the combination of Takeyama and Yamazaki also fails to teach, disclose, or suggest a "first surface" as recited in Applicant's claims 3 and 7-12.

For at least this reason, the rejection of claims 3 and 7-12 over these references should be withdrawn. MPEP §2143.

2. The Combination of Takeyama and Takagi Does Not  
Render Applicant's Claims Unpatentable

In the Office Action's rejection of claims 18-25 over Takeyama, in view of Takagi, the Office Action relies on Takeyama for all elements of the claims, except for the claimed optical path (claims 18, 20, 22 and 24); and the angle of reflection (claims 19, 21, 23, and 25). For these missing elements, the Office Action relies on Takagi. Applicant, however, does not see where in Takagi there is any teaching, express or otherwise, of a "first surface" as recited in Applicant's claims. Accordingly, since Takeyama also apparently fails to teach Applicant's "first surface", the combination of Takeyama and Takagi also fails to teach, disclose, or suggest a "first surface" as recited in Applicant's claims 18-25.

For at least this reason, the rejection of claims 18-25 over these references should be withdrawn. MPEP §2143.

3. The Combination of Takeyama and Sekita Does Not  
Render Applicant's Claim 27 Unpatentable

In its rejection of claim 27, the Office Action relies on Takeyama for all elements, except for a photoelectric device. For this element, the Office Action relies on Sekita. However, Sekita, like Takeyama, does not appear to teach, expressly or otherwise, a "first surface" as recited in Applicant's claim 27. Accordingly, because the combination of references fails to teach, disclose, or suggest all of claim elements in Applicant's claim 27, the rejection of claim 27 under 35 U.S.C. §103(a) should be withdrawn.

**CONCLUSION**

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims and allowance of this application.

**AUTHORIZATION**

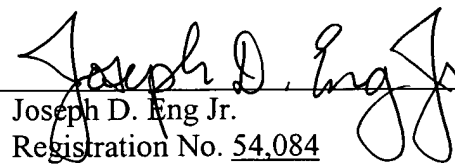
The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. **13-4500**, Order No. 1232-5261. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. **13-4500**, Order No. 1232-5261. A DUPLICATE OF THIS DOCUMENT IS ATTACHED.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: February 15, 2006

By: \_\_\_\_\_

  
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